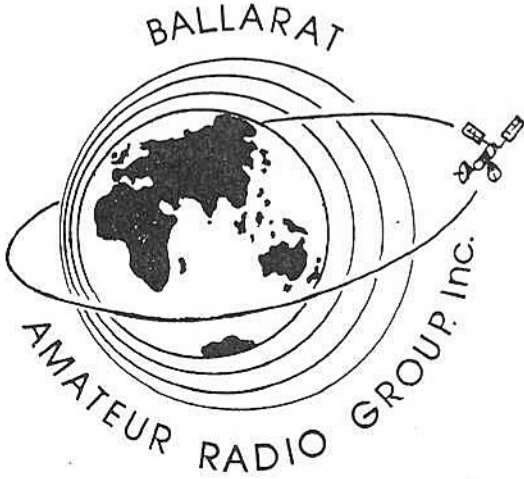


93/05 01

M A Y - 1993



# **B.A.R.G. NEWS.**

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© Monthly Newsletter of the  
Ballarat Amateur Radio Group



93/05 02



# **BALLARAT AMATEUR RADIO GROUP INC.** **EXECUTIVE COMMITTEE 1992/93**

|                     |                 |        | HOME   | WORK   |
|---------------------|-----------------|--------|--------|--------|
| PRESIDENT           | Ian Robinson    | VK3FD  | 358031 | 379175 |
| IMM. PAST PRESIDENT | Tom George      | VK3DMK | 355662 | 327234 |
| VICE PRESIDENT      | Cliff Bilston   | VK3CCB | 361249 | 330322 |
| SECRETARY           | Jim Wright      | VK3CFB | 327563 |        |
| TREASURER           | Harry Hekkema   | VK3KGL | 357563 |        |
| ASST. SECRETARY     | George Fowler   | VK3DOK | 326863 |        |
| PUBLICITY OFFICER   | Norm D'Angri    | VK3LBA | 341613 |        |
| EDUCATION OFFICER   | Tom George      | VK3DMK | 355662 | 327234 |
| NET CO-ORDINATOR    | John Hazledine  | VK3CFH | 391971 | 391035 |
| TECHNICAL OFFICER   | Merv Hooley     | VK3KAW |        | 311317 |
| MEMBERS' REPS.      | Mary Curnow     | VK3FMC | 301927 |        |
|                     | Reg Carter      | VK3CAZ | 417585 |        |
|                     | Charlie Stewart | VK3DCS | 317425 |        |

## **OFFICERS AND COMMITTEES**

|                     |                  |        |        |        |
|---------------------|------------------|--------|--------|--------|
| QSL MANAGER         | Jeff Pigdon      | VK3PAP | 327041 | 311211 |
| AWARDS MANAGER      | Maurie Batt      | VK3XEX | 422245 |        |
| PROPERTY OFFICER    | Jeff Pigdon      | VK3PAP | 327041 | 311211 |
| HAMFEST CONVENER    | Tom George       | VK3DMK | 355662 | 327234 |
| WICEN COMMITTEE     | Gordon Cornell   | VK3FGC | 392427 | 391135 |
|                     | Geoff Smith      | VK3ADB | 332112 |        |
|                     | Tom George       | VK3DMK | 355662 | 327234 |
| TECHNICAL COMMITTEE | Ian McDonald     | VK3AXH |        | 311317 |
|                     | Dick Forrester   | VK3VU  | 357663 | 391001 |
|                     | Merv Hooley      | VK3KAW |        | 311317 |
|                     | Dick Antoziewicz | VK3AEX | 323273 |        |
|                     | David McConnell  | VK3YNB |        |        |
|                     | Ben Orchard      | VK3TOP |        | 377836 |
| NEWSLETTER EDITOR   | Norm D'Angri     | VK3LBA | 341613 |        |

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REPEATERS: VK3RBA - 146.750 MHz. Voice. Mt. Buninyong. (Ch. 3)  
 VK3RBS - 146.900 MHz. Voice. Smeaton Hill. (Ch. 6)  
 VK3RPC - 144.750 MHz. Packet Mt. Warrenheip  
 VK3RBU - 438.475 MHz. Voice. Mt. Hollowback

CLUB NET: Thursday nights at 8 pm. ( 8.30 pm. during daylight saving)  
 Freq. - 3.610 MHz. +/- QRM.

FOX HUNTS: Monday nights at 7.30 pm.  
 Freq. - 146.500 MHz. Meet at Education Centre - Hopetoun St.

2 METRE SCRAMBLE: Sunday nights at 7.50 pm.  
 Freq. - 146.425 MHz. to 146.600 MHz. Call back on VK3RBA.

MEETINGS: Last Friday of every month at 7.30 pm. at  
 Ballarat Community Education Centre  
 Hopetoun St. Ballarat.

### CLUB CORRESPONDENCE TO:

The Secretary  
 B. A. R. G. Inc.  
 P. O. BOX 1261  
 MAIL CENTRE BALLARAT 3354

NEWSLETTER ARTICLES TO:  
 29 Lawrence St.  
 Alfredton  
 Ballarat  
 Vic. 3350

### LIFE MEMBERS

|              |              |
|--------------|--------------|
| MAURIE BATT  | VK3XEX       |
| KEVIN HUGHES | VK3WN        |
| IAN McDONALD | VK3AXH       |
| PHIL SEDDON  | VK3AQM       |
| GEORGE SMALL | VK3DKJ (DEC) |
| STAN WIDGERY | VK3SE        |

DISCLAIMER : Whilst every care is taken in the preparation and reporting of events and articles in this newsletter, the Ballarat Amateur Radio Group Inc. it's officers and members do not accept any liability for any disputed article or comment. Views expressed in this newsletter are not necessarily those of the Editor or the Committee of B.A.R.G. Inc.. Projects are presented in good faith and are assumed to have been validated by the contributor. Reproduction of articles for use in other Radio Club magazines is permissible providing acknowledgement of the source is given.



03/05 03



MEETING OPENED by President Ian VK3FD at 7.45pm. 46 members in attendance.

APOLOGIES. VK3 XEX, FRO, CFH, AAP, DS, NIZ, SE, AXH, LBA, AEX, LDC, YMW, TDG.

MINUTES. of previous meeting as printed in newsletter were confirmed. CAZ/XDQ

CORRESPONDENCE. Notice of S.E. Radio Group Convention, Mt Gambier. 12th & 13th June.  
Notice of Ballarat By-Pass open day Sunday 16th May.  
Donation from Ballarat Courier of \$35.00. for Fun Run assistance.

TREASURERS REPORT. General a/c \$115.20. St George a/c \$3823.00.  
Accounts passed for payment. KGL/BNC.

CLUB NET. Still well supported.

TECHNICAL Replacement for RBA nearly completed. Dick AEX serviced RBS. Packet running OK.

EDUCATION. Next Novice examination to be held 11th May.

QSL MANAGER. Jeff PAP received small number of cards.

PROPERTY: Jeff has now received most of the Club's Property but would like to hear from members with equipment on loan to complete property listing.

WICEN. Members certificates now available from Gordon FGC.

GENERAL BUSINESS. Ben TOP wishes to aquire rotator for ATV repeater.

MEETING CLOSED at 8.35pm.

73 Jim CFB.

**B.A.R.G. SCRAMBLE RESULTS  
AS AT 30TH. APRIL**

VK3DCS - 371  
VK3EF - 357  
VK3DET - 349  
VK3CAZ - 308  
VK3KAY - 274  
VK3LBA - 247  
VK3DOK - 242  
VK3JFL - 236  
VK3FMC - 163  
VK3XDQ - 77  
VK3CIS - 38  
VK3YMW - 20  
VK3TAR - 19

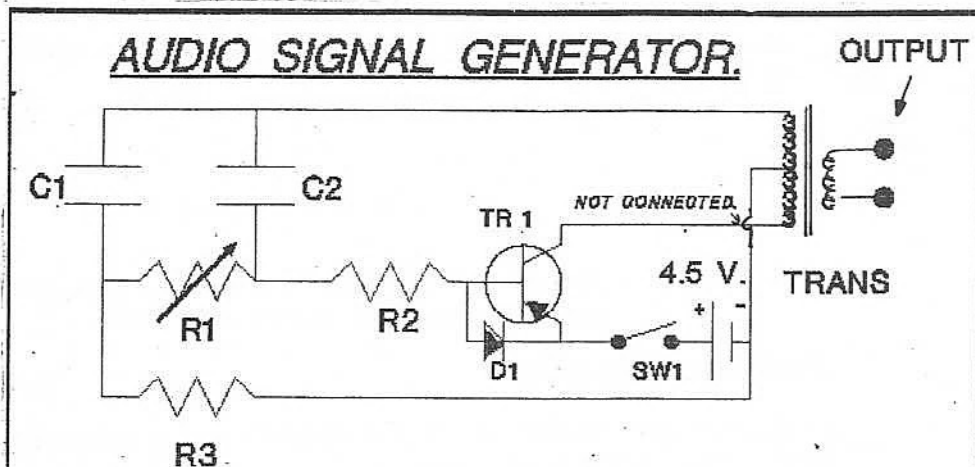
SERG CONVENTION  
MOUNT GAMBIER S.A.  
12th. & 13th. JUNE

BIGGER & BETTER  
THAN EVER

FOR DETAILS CONTACT

CONVENTION CO-ORDINATOR  
SOUTH EAST RADIO GROUP  
BOX 1103  
MOUNT GAMBIER 5290

SEE ARTICLE IN MAY A.R.



**COMPONENTS.**

C1..... 0.1 uf CAPACITOR. TR1..... 25A733 PNP TRANSISTOR  
C2..... 0.05 uf CAPACITOR. OR EQUIV.  
R1..... 50 K ohm POT SW1..... TOGGLE SWITCH.  
R2..... 1 K ohm RESISTOR. TRANS... 8 ohm 900CT OUTPUT  
R3 ..... 4.7 K ohm RESISTOR. AUDIO TRANSFORMER  
D1 ..... IN4143 SILICON DIODE. SOLDER, WIRE, CASE ECT.

A SIMPLE BUT HANDY PROJECT FROM RICHARD (VK3JFL)



BY REG. (VK3CAZ)

73 de REG VK3CAZ

Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω Ω

## COMPUTER DEFINITIONS

[illegible]



93/05 05



## BALLOON UPDATE

Australian adventurer and businessman Dick Smith (VK3DIK), hopes to complete the first crossing of Australia by balloon (AUSTRALIAN GEOGRAPHIC) in June this year. With pilot John Wallington he will launching from Carnarvon W.A and be aiming for a landing anywhere east of the Great Dividing Range. Six previous attempts by others have fallen short of the mark, the best efforts being landings near Broken Hill NSW and Naracoorte S.A.

The Bureau of Meteorology has a very central role in providing data for the planning and launching of the flight, and no doubt will gain some very useful first hand information during the flight as the wind and temperature variations over the continent are varied and complex..

BUT WE MAY HAVE A RACE ! At least a 'flight in company', as it has been announced that Phil Kavanagh (of Kavanagh Balloons Melbourne) and his co-pilot Brian Smith expect to launch at the same time as Dick Smith.

The Kavanagh balloon (AUSTRALIAN MAID) is also of the Roziere design, which incorporates both helium and hot air, and Phil is eager to make an attempt at the height record for this type of balloon, although his balloon is only fitted with the traditional wicker basket.

The Dick Smith Balloon is rather sophisticated in that it has a Kevlar/carbon fibre gondola fitted out for survival should a sea landing be required, electric power generated by a gas powered generator, coffee making facilities, a portable toilet, and hi-tech communications and navigation equipment.

The 2970 cubic metre balloon is of the Roziere type designed and built by Don Cameron and uses a Helium compartment warmed by sunlight during the day and by gas-heated air during the night. In an emergency the balloon is able to function using either method independently but if all else fails the canopies can be redeployed to function as a parachute.

At the time of writing there was no information available concerning the frequencies to be used for communications, but it noted that Dick has YAESU H/F and VHF rigs on board as well as satellite gear.

Prior to launch, which of course will be subject to the data from the Weather Bureau, and during the flight, information and positions will be published daily in the 'Australian' newspaper and by telephone 24 hours a day by phoning 0055 29060 (25c buys 42.9 secs.)

The flight, if successful should take 2 1/2 to 3 days.

(Thanks to Australian Geographic & Bureau of Meteorology)

**ERRATA** : Last month's BARG CALLSIGNS. VK3ADG should read VK3AGD

### TICKET INSPECTORS' TORCHES

The first electric torch was square in shape and was made by the British Electric Lamp Company in 1891. Sixty examples of this model were used by ticket inspectors of the Bristol Omnibus Company in 1892.

The Electric and Novelty Company of New York (later known as the Ever Ready Company) brought out the first tubular electric torch in 1898.



93/05 06

## COMING EVENTS

### May:

14th: Natter Night

28th: BARG Meeting  
(Junk Auction)

### June:

Dick Smith Balloon  
flight across Aust.

11th: Natter Night  
12th, 13th. Mt. Gambier  
12th-14th.  
Queen's Birthday  
Mallee Rally

19th-20th.  
Novice Contest

25th: BARG Meeting

### July:

9th. Natter Night

30th: BARG ANNUAL G. M.

### August:

\*14th: R. D. Contest  
\*15th: R. D. Contest

27th: BARG Meeting

\* Dates not confirmed.

# NOTICE BOARD



## FOR SALE COMMODORE HARDWARE

1. TWIN 360K DISC DRIVES (MODEL 8050)  
WITH TRACTOR PRINTER (MODEL 4022) &  
ADAPTORS TO SUIT COMMODORE 64. \$250.00
2. MODEL 8032 COMPUTER WITH GREEN SCREEN  
MONITOR \$100.00
3. MODEL 8016 COMPUTER WITH MONITOR.  
(HAS A FAULT BUT CIRCUIT IS AVAILABLE) \$50.00
4. TRACTOR PRINTER (MODEL 4022) \$100.00
5. 2 OFF DATASETTE UNITS PAIR - \$50.00

MANUALS ARE AVAILABLE AND SOME AMATEUR RADIO  
PROGRAMS GO WITH THE DISC DRIVES.

\$400.00 THE LOT OR INDIVIDUALLY AS PRICED.

CONTACT: DENNIS VK3TDG - PHONE 054-762243

HONESTY is the best policy but  
INSANITY is the best defence.

## URGENT

### WANTED

Articles suitable for publication  
in the B.A.R.G. Newsletter.

The purpose of this newsletter is  
defeated if suitable articles are  
not submitted by the members.  
Thank you to the FEW members who  
have assisted during the year, but  
there MUST be other people that have  
suitable hobby related stories,  
cartoons, projects, problems,  
reports on gear or events, inventions,  
vintage radio, educational, newsworthy  
articles or opinions that would be of  
interest to other members.

If YOU can assist with a contribution  
please send it in, and if suitable  
it will be published. There is no  
need for typing providing the writing  
is legible.

Members have indicated that they want  
the newsletter to continue, but the  
quality relies on members contributions.

Norm. VK3LBA Ed.

## FOR SALE

KENWOOD TS520 HF XCVR  
CROSS NEEDLE SWR BRIDGE  
KENWOOD AT180 ANT. TUNER  
HF. TRAP VERT. ANTENNA-W.W.  
PLUS SEVERAL SUNDRY ITEMS

THE LOT FOR \$600

CONTACT BRIAN - VK3KQB  
39-2808

WANTED  
FOR ATV REPEATER  
ANTENNA ROTATOR  
WITH INDICATOR  
-----  
MUST BE IN GOOD  
WORKING ORDER  
BEN - VK3TOP

LIFE IS A YO-YO UP DOWN\* DOWN

BEHOLD THE WARRANTY: THE BOLD PRINT GIVETH,  
and the fine print taketh away

IF THE WORLD IS ROUND IT WILL NEVER COME TO AN END



93/05 07



## A.T.V. - AM VERSUS FM FOR 23CM.

For ATV on 23cm. and above a fundamental decision has to be made whether the mode shall be amplitude or frequency modulated.

### THE CASE FOR AM (as used on 70cm.)

AM has been the traditional mode of operation since the invention of the Marconi EMI system. It has proved itself over the years and is a fairly easy mode to produce. It occupies a bandwidth of 2 times the highest modulated frequency, however this can usually be reduced by attenuating one sideband.

This is done by filtering, which can be achieved successfully.

On 70cm. very few stations adopt true vestigial sideband because of the technical problems in suppressing the unwanted spectral products to amplify AM using a linear amplifier. As the frequency increases such amplifiers become very expensive and very inefficient.

An AM TV signal can be demodulated using domestic equipment on 70cm.UHF.

### THE CASE FOR FM ON 23CM.

This is the mode of the future.

The bandwidth necessary is very large but in practice the deviation produced by the modulation can be kept as low as the highest modulating frequency.

In FM if the carrier is deviated in frequency its amplitude remains constant, amplification is by class C, and linearity is unimportant.

On bands higher than 70cm. reasonable power can be obtained. (35 Watts on 23 cm. is fairly good.)

DAVID - VK3YNB

\*\*\*\*\*

## B.A.R.G. NOMINATIONS FOR OFFICE - 1993/94

The Annual General Meeting will be held on Friday 30th. July 1993

If you wish to nominate a member for a position please complete the details below and return the completed form to the Secretary Jim (VK3CFB) by Friday 16th. July.

### NOMINATION FORM

We wish to nominate ..... for the  
position of ..... of B.A.R.G.  
for the 1993 / 1994 year.

Nominator (Signature) ..... Callsign .....

Seconder (Signature) ..... Callsign .....

Signature of nominated person .....

Date: .....

\*\*\*\*\*



93/05 08

There is always room at the top  
but the elevator always seems to  
be busy.

\*\*\*\*\*

#### DEFINITIONS

##### OHM COOKING

What happens if you overload a resistor.

##### PI-NETWORK

A Catering Distribution Company.

##### SUPER CONDUCTOR

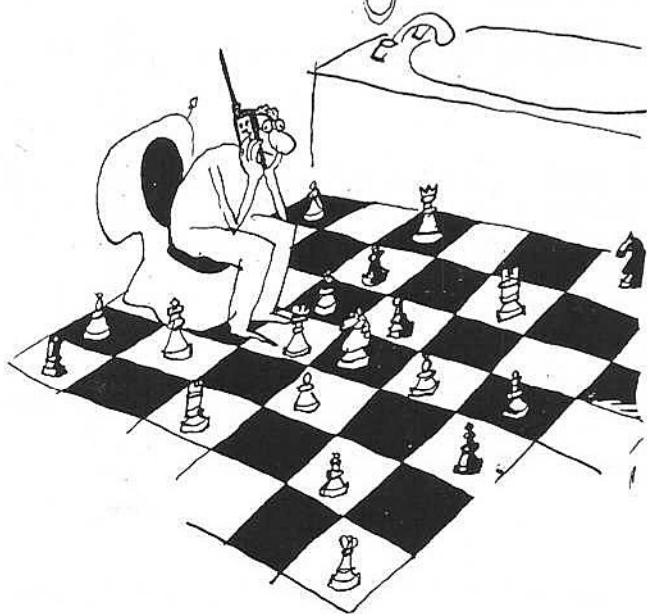
The most efficient worker on the trams.

##### VARIABLE RELUCTANCE PICK-UP

The sort of thing that happens in Fitzroy St.

##### MOTORIST

One who keeps pedestrians in good  
running order.



#### HOW DID YOU GO ?

##### ANSWERS TO LAST MONTH'S PROBLEM.

The measured resistance between X and Y in each case would be

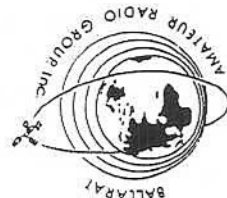
1. 30 OHMS
2. 10 OHMS
3. 3.33 OHMS

8

MONTHLY NEWSLETTER OF THE BALLARAT AMATEUR RADIO GROUP INC.

## B. A. R. G. NEWS

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